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Why Ireland? A Qualitative Review of the Factors Influencing the Location of US Multinationals in Ireland with Particular Reference to the Impact of Labour Issues*

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Abstract: The encouragement of foreign direct investment (FDI) represents a key plank of industrial policy in Ireland. This paper considers the impact of labour issues on the decision of US multinational corporations (MNCs) to locate facilities in Ireland. Drawing on data gathered in ten major US corporations, and from executives employed in the main industrial promotions agencies, this paper evaluates the relative impact of labour issues on the location of MNCs. While our findings point to the critical significance of Ireland's low corporate tax regime in attracting US FDI to Ireland, they also identify the relative impact of issues such as labour supply, quality and cost, and broader human resource management factors such as labour flexibility and trade union recognition, on the location decision of inward investing MNCs.

I INTRODUCTION

Much has been made of the contribution of labour issues to the growth of foreign direct investment (FDI) in Ireland over the past twenty years. Of particular significance in this regard has been the argued quality and supply of labour (O'Hearn, 1998; Tansey, 1998; Arrow 1997; Wrynn, 1997). Other related dimensions such as labour costs, labour flexibility and industrial relations harmony have also been identified by some commentators as

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important contributors to Ireland's attractiveness as a site for FDI (O'Grada, 1997). More conventionally, it might be argued that direct (e.g., grants) and indirect (particularly low corporation tax) financial incentives have been the major factors stimulating FDI growth in Ireland.

However, when we look for research evidence to inform our interpretation of the contribution of labour issues to growth in FDI we find a dearth of information. In reviewing the contemporary literature, it is hardly surprising that much emphasis has been placed on the outcomes of direct investment by multinational corporations (MNCs) in the Irish economy. However, there appears to be limited independent analysis of the drivers of such investment. The best available data is based on survey-type research, principally conducted by Hannigan (1999, 2000). This data drawn from surveys of MNCs which have located in Ireland, helps identify the factors deemed critical to the competitiveness of their Irish operations.

Useful though this data is, it is limited by the inevitable snapshot profile of survey based research. In particular, it does not provide an in-depth perspective on the process which MNCs follow in making location decisions and the relative significance of different factors in influencing the final decision. It is also based solely on input from executives working in the Irish subsidiary. This paper aims to add to the body of knowledge on FDI in Ireland by providing qualitative evidence on the key factors influencing the location decision of inward-investing MNCs using data collected from interviews with senior executives in the corporate head-quarters of ten large "blue-chip" US firms with very significant subsidiary operations in Ireland. The paper also provides some insights on the perceived comparative advantage of Ireland as a location for inward investment. In light of the rapid changes occurring in the labour market in recent years, particularly in the areas of labour availability and cost, this paper should be read in the historical context in which it is set: namely, that the research data was collected at a time when the Irish labour market was much much looser, with fewer skills shortages and a greater supply of skilled labour.

II BACKGROUND

A critical aspect of Irish Government policy is the attraction of foreign direct investment through incentives to multinational companies to establish facilities in Ireland. There are now over 1,200 overseas manufacturing and internationally traded services companies operating in Ireland which employ approximately 135,000 people with a particular focus on electronics, pharmaceuticals, healthcare, software and "teleservices" (Hannigan, 1999, 2000; Tansey, 1998). Employment in MNCs accounts for roughly one-third of the industrial workforce. These foreign owned companies account for 55 per cent of manufactured output and some 70 per cent of industrial exports. The main sources of FDI in Ireland are the US, the UK, and Germany. US owned firms have a particularly strong presence in Ireland: over 400 such firms employ over 50,000 people.

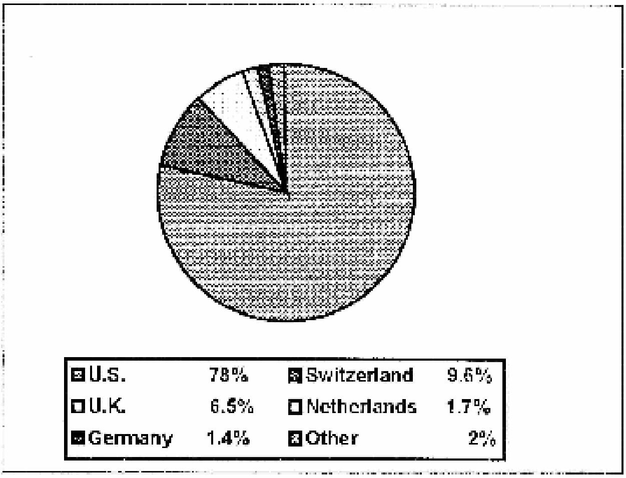
Recent years have also witnessed significant growth in the scale of FDI in Ireland. The ten year period 1987-1997 saw a 50 per cent increase in the number of foreign multinationals investing in the Irish economy (OECD, 1997). In terms of investment, OECD data reveals that there has been a threefold increase in FDI inflows to Ireland since 1990, with the US now accounting for almost 85 per cent of all such inflows (see Table 1 and Figure 1).

Table 1: Direct Investment Inflows to Ireland 1990-1998 (IR£ Million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Inflow	125	232	221	261	207	235	360	383	415
1990 (Base Year = 100)	100	186	177	209	166	188	288	306	332
US Inflow	65	113	135	192	153	184	300	323	324
1990 (Base Year = 100)	100	174	208	295	235	283	461	497	498

Figures compiled by data published by OECD.

Figure 1: Origin of FDI Inflows to Ireland 1998



The net effect of Ireland's policy of targeting mobile foreign investment is evidenced today in the locating in Ireland of close to one-quarter (24 per cent) of all available US manufacturing investments in Europe, and close to 14 per cent of all FDI projects locating in Europe (The Economist, 1997). Since 1980, 40 per cent of all new US inward investment in European electronics has come to Ireland while nearly one-third of all personal computers sold in Europe are now made in Ireland (The Economist, 1997). In 1995 Ireland was the ninth most important global location for US direct investment (sixth most important in Europe; third in 1994). The Industrial Development Agency (IDA) estimates that Ireland is by some way the most profitable European location for US manufacturing firms, providing a return on investment of approximately 25 per cent over the past decade, significantly higher than the EU average (IDA, 1999).

One of the major reasons proffered for such high FDI inward investment is the volume of Government aid on offer, such as a generous subsidy programme based partly on the promise of jobs but also including, where appropriate, rent subsidies, offsets against capital investment, and a low tax rate for profits derived from "manufacturing and qualifying services". However, aside from Government incentives, the Irish economy was able to offer a ready supply of scientific-technical labour at an affordable cost to satisfy the needs of US corporations looking for access to the European market (McGovern, 1998).

Investment by multinationals has brought considerable benefits to the Irish economy. Apart from the obvious benefits of increased employment and economic prosperity, Tansey (1998) points to the modernisation of the Irish industrial base and the rapid growth in national productivity as a direct consequence of inward investment. As a result, Ireland's capacity to absorb technological change at national level increased, leading to an enhanced capacity to compete in international markets.

However, despite the high level of inward investment and employment generated by foreign multinationals in Ireland, they have nonetheless attracted their fair share of criticism. Kennedy (1991) and Tansey (1998) argue that the true value of foreign multinationals to the Irish economy is masked by the high levels of profit repatriation taking place, given Ireland's low rate of corporation tax. Furthermore, they argue that the long-term commitment of inward-investing multinationals to the Irish economy may be contingent on the continuation of low levels of corporation tax and cite the lack of domestic linkages created by multinationals as a cause for concern. Indeed, the level of domestic linkages in the economy has long been a recurrent theme in the literature dealing with multinationals in Ireland.

Some commentators have pointed to the same particular "downsides" of Ireland's reliance on FDI, such as the following: (a) many are located in very volatile sectors (it is estimated that 15 per cent of Irish electronics jobs are "high risk" and that many more "medium risk": (McGowan, 1996); (b) transfer pricing and high profit repatriation: many are confined to low level activities which are quite "footloose"; (c) there is a low research and development component and (d) many have weak linkages into the domestic economy.

III METHODOLOGY

The divergence of academic opinion regarding the factors influencing the location decision of multinationals highlights the need for more independent data on the relative attractions of Ireland as a location for FDI. Such an analysis can also inform future industrial policy in this area. This paper aims to analyse the key factors influencing the location decision of inward-investing US firms with particular focus on the impact of labour issues. Despite a threefold increase in FDI inflows to Ireland over the period 1990-1997, there are currently no qualitative studies addressing the factors influencing the location of inward investment in Ireland. Of particular concern is the lack of research data on corporate level decision making at US headquarter level. In seeking to bridge this gap, this paper seeks to identify the key factors impacting on the location decision of US corporations which have established significant subsidiary operations in Ireland.

Initial data on the extent and origin of FDI in Ireland over the relevant period was secured via the assistance of the main Irish industrial promotions agencies, particularly the IDA and Shannon Development. Primary research subsequently took place in the US over a ten-month period. It consisted of interviews (personal and telephone), company visits and review of secondary data on these corporations (company publications, annual reports, independent industry analyses and newspaper material). Ten corporations were selected for this research. The major criterion used in selecting firms was the scale of investment (bias towards large investment).The selection of firms was facilitated through discussions with senior US based executives in Ireland's main industrial promotions agencies. This was particularly helpful in identifying individuals who had played a critical role in their Corporation's decision to locate a subsidiary in Ireland. A profile of the firms involved is outlined in Table 2. Based on advice from the Irish industrial promotions agencies, the first author made initial contact with the individuals identified and arranged for an in-depth interview based on a semi-formal schedule as discussed below. The primary research component also entailed face to face interviews with four US based senior executives in Ireland's industrial promotions agencies. These executives all had significant experience in promoting Ireland as a site for FDI. While each specialised in different industrial sectors, together these executives were responsible for the attraction to Ireland of the most significant and extensive FDI projects the country has seen to date.

Table 2: Company Profile

	Industry Sector	No. of Employees worldwide*	No. of Employees in Ireland*	Irish Subsidiary**	Interviewee
Company A***	Electronics	400	40	Top 350 Irish Co.	Chief Financial Officer
Company B	Electronics	13,000	750	Top 40 Irish Co.	VP Manufacturing
Company C	Software	30,000	400	Top 20 Irish Co.	Director and VP Taxation
Company D	Office Equipment	110,000	770	Top 120 Irish Co.	World-Wide Manufacturing Strategy Co-ordination Manager
Company E	Electronics	8,050	120	Top 340 Irish Co.	President
Company F	Mechanical Engineering	65,000	200	Not Listed	Corporate Director HR
Company G	Electronics	1,200	200	Top 160 Irish Co.	VP Strategy
Company H	Electronics	32,600	4,200	Top 10 Irish Co.	VP HR
Company I	Electronics	2,400	150	Not Listed	VP International Operations
Company J	Electronics	6,900	1,100	Top 90 Irish Co.	VP HR

Notes: * Employment size at time of interview (most of these firms have significantly increased employment in the Irish subsidiary since then).
** Performance of Irish subsidiary was measured by reference to Top 1,000 Companies published in Business & Finance (1999).
*** Company A was selected because of the status it attained as one of the fastest growing high-tech companies in Fortune magazines business listings (1997).

The ten companies currently employ over 14,000 employees in Ireland and have a cumulative turnover for their Irish operations of £5,600 million. This indicates the important role which these companies play in the Irish economy. Geographically, eight of the companies located their Irish subsidiaries in close proximity to Dublin, with one company in the mid-west and another based in the west of Ireland. Seven of the ten firms established their Irish operations in the 1990s, one in the 1980s and two in the 1970s. All are well known companies and eight are named in the Business & Finance listings (1999) of the top Irish companies. The two “non-listed” firms are themselves part of very significant international corporations.

The interviews followed a deliberate schedule as summarised in Appendix 1. The interviews focused on the key factors influencing the respondent organisation’s decision to locate in Ireland. The particular labour issues explored were labour availability, labour quality, labour costs, labour regulation and industrial relations/human resource management. The interviews entailed a strong comparative dimension both in relation to each Corporation’s US operations, other foreign operations and the process through which one country is selected over another for FDI. As noted earlier, these interviews were conducted over a ten-month period, with senior executives of US multinationals in the ten selected corporations. In all cases, the interviewees either led or played a key role in the management team vested with responsibility for locating their corporation’s subsidiary in Ireland. A number of these executives were subsequently involved in the start-up stages of the Irish subsidiary. However, all remain employed at headquarters level and thus retain the capacity to provide a corporate perspective on both Ireland as an FDI location and on the performance of the Irish subsidiary. The interviews with senior executives in Ireland’s industrial promotions agencies followed a broadly similar schedule but focused on the general experience of respondents in selling Ireland as a site for FDI to leading US Corporations.

Clearly, it should be recognised that the small sample size does not allow us to draw definitive conclusions from the data collected. However, our data does provide valuable insights into the context and process through which an investment location is decided upon by major multinational corporations.

IV FINDINGS

The following sections contain the findings of the primary research data collected. The key factors in the location decision of multinationals are first identified and thereafter follows a discussion on the five specific issues of labour availability, education standards, labour quality, labour cost and labour regulation.

Decision to Locate in Ireland

The results of the research appear to confirm the importance being placed on labour factors in the location decision of inward investing multinational companies. However, for most organisations the critical factor positively influencing the final decision in Ireland’s favour was its low rate of corporation tax. While this finding stands in stark contrast to the work of Wheeler and Mody (1992) who, in studying the investment location decisions of US electronics firms found that such firms exhibit little or no sensitivity to differences in tax rates, it seems to confirm the widely held opinion that Ireland's low level of corporation tax is a key factor underpinning the country's success in attracting FDI investment. The following two quotes are indicative of views elicited:

> (In response to question on significance of corporation tax) Critical … very important in differentiating Ireland from Scotland.
>
> Vice President (Manufacturing), Company B.

> (after eliminating other prospective locations in Europe)…This left Ireland and the UK. The grants were the same in both, similarly with labour issues … but when you added in 10 per cent corporation tax, that swung it … no question.
>
> Vice President (Human Resources), Company H.

Table 3: Key Factors in the Decision to Locate in Ireland

Company A	Language	Location in EU	Low Corporation Tax	Labour Availability and Quality
Company B	Location in EU	Low Corporation Tax	Labour Availability and Quality	Education
Company C	Infrastructure	Education	Low Corporation Tax	------------
Company D	Financial Package (inc. Corporation Tax)	Labour Availability and Quality	------------	------------
Company E	Location in EU	Financial Package (inc. Corporation Tax)	------------	------------
Company F	Labour Availability and Quality	Location in EU	Financial Package (inc. Corporation Tax)	------------
Company G	Low Corporation Tax	Financial Package (inc. Corporation Tax)	Labour Availability and Quality	Cultural Identity
Company H	Low Corporation Tax	Financial Package (inc. Corporation Tax)	Labour Regulation	Infrastructure
Company I	Previous Irish Experience	------------	------------	------------
Company J	Labour Availability and Quality	------------	------------	------------

In addition, the need to establish a European base ranked high in the mindsets of top management. While Bacon (1997) predicts that there will be greater competition for FDI from Eastern European countries, our research indicates that respondents expressed a preference to locate within the boundaries of the EU rather than in lower-cost Eastern European countries. It identified the UK and the Netherlands as Ireland's principal competitors in attracting FDI. However, respondents identified perceived high levels of labour regulation in the Netherlands as adding considerably to the cost base there and making investment less attractive. In the UK a number of respondents identified high levels of corporation tax as a significant disincentive for investors.

Table 3 summarises the primary factors listed in order of importance by senior executives in response to questions asking them to identify the key factors influencing their decision to locate in Ireland. Interestingly, where the order of the factors varies considerably, there is little variation in the type of factors listed.

The issue of infrastructure is mentioned specifically in only one case but has been highlighted as a key issue impacting on the extent of inward investment. For example, Hannigan (1999) ranks the issue of infrastructure as the fourth most important factor influencing competitiveness in the Irish economy. Our data suggest that the quality of a country's infrastructure was used as a critical initial criterion for differentiating among locations. However, once it was felt that a particular location had the necessary infrastructural capacity to support the proposed investment, then other factors, such as financial incentives, came into play. In the case interviews, the issues of infrastructure and labour capacity tended to be considered as synonymous. Thus, it is hardly surprising to find that the choice of location within Ireland appears to have been influenced by both labour and infrastructural considerations. The desire to be located near the largest employment centre, the proximity of universities and the attraction of an international airport with transatlantic links largely explained why eight of the ten companies studied located within the greater Dublin area. Interestingly, while all of the executives interviewed expressed general satisfaction with the level of infrastructure in Ireland, particular concern was expressed about air travel, particularly the unavailability of adequate direct flights to Europe. Again, one must caution that demands on the nation's – and particularly Dublin's – infrastructure have increased substantially since these interviews were conducted and it is plausible to suggest that infrastructural concerns will have increased in the interim.

Labour Availability and the Tightening Labour Market

Significant change has occurred within the Irish labour market in recent years. Rapid economic growth has fuelled the demand for labour in the economy, particularly in relation to technical and highly skilled workers. Tansey (1998) argues that the sheer scale of labour demand has induced an acceleration in labour supply growth. He cites three factors to explain the increase in labour supply:

1. An increase in the population of working age;
2. A rise in labour force participation, particularly amongst women;
3. A heavy decrease in emigration rates.

While these factors have undoubtedly helped satisfy labour demand, significant shortages are currently being experienced within the economy. Hannigan (1999) highlights the concerns expressed by multinationals that tight conditions in the labour market are impacting on competitiveness and may have a detrimental effect on future growth.

While a plentiful supply of labour has long been considered a major factor influencing multinationals to locate in Ireland, conventional wisdom would now suggest that this factor has decreased in importance in the tightening labour market now being experienced. At the time when the interviews were conducted for this study the level of unemployment was approximately 10 per cent. Consequently, it is hardly surprising that most companies reported few problems with labour supply. One firm had experienced difficulties in attracting qualified sales people with languages and commented on the high turnover of staff within that category. Indeed, the shortage of technical staff with language skills in the Irish economy has been documented and recent government initiatives have endeavoured to redress this imbalance, particularly in attempting to satisfy demand in the teleservices industry. Interviews with executives working for Ireland's industrial promotions agencies indicated their concern with future labour supply. The following quotes from two such executives highlight this concern:

> Labour availability is viewed as positive but there are problem areas emerging: firstly there are shortages in the languages area ...a problem for the future may be the level of person. …secondly we need good technician level people; this has been a hugely neglected area. There is a need for more investment and output of these people.… A good example is XYZ Ltd – [leading US electronics firm in greater Dublin area] – 75% of their jobs are at technician level or above...they will probably get the people but

> other companies will then find shortages. New areas also need a focus in this respect, such as [bridging]the spread of skills in mechanics and electronics.
>
> In terms of labour shortages there are some areas of concern; especially engineering and languages. There is a strong regional factor...many companies want to go to Dublin (quality of life for expatriates, etc): this puts pressures on availability. It is getting difficult to get companies to locate in the country...

A high turnover of employees at management level was identified by one executive as a setback as Ireland continues to attract growing levels of foreign investment. He blamed the specific targeting of individuals by competitor firms and the ability of new companies to pay the salaries demanded as reasons for this occurrence. Several executives also commented on the plentiful supply of blue collar workers and their opinion that this category of worker tended to be "much better" than in the US. However, our research did highlight an expectation of the tightening of the labour market. In fact, three of the companies expressed a readiness for such an occurrence, having adopted measures designed to deal with such an eventuality.

> There may be future skill shortages in the labour market, but we feel we can identify Irish expatriates here in the US, who may be even better trained in (our) corporate culture who want to go back to Ireland.
>
> Vice-President, (Strategy) Company G.

Education Standards

The quality of the Irish education system and the existence of a high skills labour pool has long been recognised as being critically important to the attraction of inward investment. A growing awareness of the need to develop human capital has led to substantial improvements in the provision of education in Ireland since the 1960s and has been seen as contributing to sustained growth in the economy (Tansey, 1998; World Investment Report, 1998). Increased investment in education, particularly at second-level has led to Ireland having one of the highest levels of participation in second and third level education of OECD countries (Leddin and Walsh 1998; OECD, 1997). The Irish education system also holds a high ranking in meeting the needs of a competitive economy (World Competitiveness Yearbook, 1998).

In their study of locations attractive to US foreign direct investment, Cooke and Noble (1998) found evidence that a country's education and skill base are by far the most critical factors in determining an industrial relation's systems attractiveness to foreign investment. Likewise, Hannigan (1999) cites the Irish education system as being the most important factor influencing the competitiveness of multinationals located in Ireland. In this context, both McGovern (1998) and Gunnigle, Morley and Heraty (1997) argue that it was Ireland's unique ability to provide a cheap supply of graduate English-speaking labour, that has aided the IDA and other agencies in successfully attracting large-scale investment from multinational companies.

Despite the many positive attributes of the Irish educational system, several weaknesses exist. Government spending (per capita) on primary and secondary education is the lowest of any EU country and this has been cited as contributing to the high pupil/teacher ratio and the serious deficiencies in educational facilities and capital equipment which exist (Economist Intelligence Unit, 2000; OECD, 1997). Similarly, low overall levels of educational attainment exist (Table 4), particularly among older age groups, although this has been attributed to the low achievement rates of previous generations.

Table 4: Percentage of Population which have Completed Secondary Education by Age Group

	25 - 34	35 - 44	45 - 54	55 - 64
Ireland	64	51	36	27
UK	86	80	72	59
Germany	89	88	84	72
France	86	74	62	42
Spain	47	32	18	10

Note: Figures compiled by data published by OECD.

Moreover, the low level of foreign language proficiency among second and third level graduates has attracted unfavourable international comment (Kenny and Sheikh, 2000; OECD, 1999). In light of the increasing role of foreign trade, growing levels of inward FDI and a burgeoning teleservices sector, the substantial decrease in the numbers of students taking foreign languages to the end of secondary education is a cause of concern (Department of Enterprise and Employment, 1997).

In evaluating labour quality in Ireland, the picture presented in respondent firms is a favourable one. Considering the breadth of knowledge exhibited by US senior executives on the Irish education system, it is clear that this was a critical factor in the location decision. There was a broad consensus among the firms studied that the overall quality of labour in Ireland was of a high standard. This reinforces the results of earlier research highlighting the high quality of the Irish workforce (Gunnigle, Morley and Heraty, 1997; Hannigan, 2000). When asked to assess comparatively the quality of the Irish workforce with that of their country of origin, respondents in all ten corporations believed that overall educational standards were equivalent or better than in the US. However, respondents made a clear distinction between the standards of education at second and third level.

> In assessing overall standards, I would say Ireland has better standards below college level and is equivalent at the college level. However, at graduate level and research, there is nothing to touch the top US colleges (Cutting edge research, etc.)
>
> Vice-President (Human Resources), Company H.

> We recruit mostly technicians and university graduates. You don't have universities on a par with Stanford or MIT, but the average standard of education is excellent.
>
> Vice President, (Strategy) Company G.

> At high school, Ireland has more structure and discipline but possibly less emphasis on innovation and personal development. At third level, we are getting less Masters level than we were used of in the US.
>
> World-wide Manufacturing Strategy Co-ordination Manager, Company D.

The clear message here, is that broadly speaking the output of Ireland's second and third level education systems is very satisfactory. However, when we look specifically at third level we found that respondents in the firms studied differentiated between the "standard product", for example, graduate engineers or technicians and "cutting edge" post-graduates. In contrast to the leading US Universities, their Irish counterparts are not seen as providing such "cutting edge" graduates as might be required for specialist research and product development work. However, it was also pointed out by respondents that much of this specialist work is undertaken at corporate headquarters and the Irish subsidiary is mostly used for manufacturing/service delivery purposes.

Labour Quality

Given the solid education standards prevalent in the Irish economy, one would expect to find few problems with the quality of the workforce employed by inward investing US firms. Indeed, all the executives interviewed expressed a high degree of satisfaction with the quality and work ethic of the staff employed. This may be due to the fact that skill levels found in foreign multinationals located in Ireland are higher than those in indigenous industry. Barry et al. (1999) attribute this finding to the fact that foreign multinationals are paying 25 per cent higher wage rates than indigenous industry and thus experience less difficulty in attracting high quality graduates. In comparative terms, labour quality was perceived by executives as being favourably comparable with other investment locations and on a par with standards in the US. In terms of productivity and the performance of the Irish subsidiary, there was again a high level of satisfaction expressed by respondents. Typical of the observations received include:

> In terms of performance to date, we've met or beaten every target that was set. We are on track to stay with the pack. Also our ramp up in Ireland has probably been the fastest we have seen and has been as smooth as possible.
>
> World-Wide Manufacturing Strategy Co-ordination Manager, Company D.

> Ireland is way up there and actually led the way in terms of relative quality. Productivity is very high and team-working is going very well. Also, our new facility got going in record time.
>
> Vice-President (Human Resources) , Company J.

Labour Costs

The nature of a firm's product and the intensity of competition in the marketplace will have a significant bearing on the importance of controlling labour costs as a factor influencing the location of FDI. Indeed, Cooke and Noble (1998) state that firms will first decide whether to locate in a high-skilled or low-skilled economy before looking at specific locations. In relation to the importance of labour costs in Ireland, Hannigan (1999) notes that this issue is less critically important than one might have assumed it to be. However, he points out that wage levels have risen and that they are likely to be pushed up even further in a tight labour market. The issue of wage costs has also been discussed by Gunnigle et al. (1997a and b) and Roche and Geary (1994) who find that foreign-owned companies are more likely to pay "above the norm" increases. Underpinning most of the Irish literature on labour costs has been an attempt to establish the impact of centralised bargaining. Tansey (1998) points to the series of national agreements concluded since 1987 as having the dual effect of moderating pay increases and improving the competitiveness of multinational operations in Ireland. Meanwhile, Sexton et al. (1996) argues that the presence of a highly skilled workforce combined with moderate wage increases has been the over-riding factors in attracting multinational investment.

In a European context, Ireland compares favourably to other European states in terms of labour costs (see Table 5). It is interesting to note that despite Ireland's Celtic Tiger status, Irish wage rates have yet to eclipse those of our European neighbours, giving Ireland considerable leverage in attracting inward investment.

Table 5: Average Hourly Costs in Manufacturing Industry 1999 (ECUs)

EU - 15	IRL	UK	D	F	E	US	JP
20.3	13.9	13.4*	28.6	22.3	14.8	17.4	19.7

Note: As Published in National Income and Expenditure Data by Eurostat, 1999.
* Represents 1995 figure.

There was a general consensus among respondents that labour costs were comparatively lower in Ireland than in the US, but when indirect labour costs (especially social benefits, etc) were taken into account, the cost of labour in Ireland was seen by respondents as more or less equivalent to the US.

> Labour costs are about the same between the US and Ireland. Irish wage levels are 80% of those in the US, but when social costs are factored in, they ended up around the same.
>
> Chief Financial Officer, Company A.

Labour Regulation

A number of commentators have identified the extent of labour regulation in various European Union states as a negative factor of many inward investing multinational companies, and particularly so in relation to US firms (Dunning, 1993; Sparrow and Hiltrop, 1994). Traditionally, there has been an aversion among MNCs to labour regulation as interfering with the mechanics of the market and restricting their freedom to manage (Dunning, 1993). Recent studies have highlighted a strong negative correlation between levels of labour regulation and levels of direct foreign investment (Cooke, 1997). Indeed Hannigan (1999) points to labour regulation as the weakest area of performance in the Irish economy. He argues that increasing levels of EU legislation are contributing to high increases in labour costs. Certainly, recent measures such as the Working Time and Parental Leave directives, while significantly improving the rights of employees have seemingly fuelled concerns among US MNCs that such intervention makes some European locations less attractive as sites for FDI by adding to labour costs. More generally, it is sometimes argued that the EU's preferred "social market" approach, characterised by comparatively high levels of labour regulation and strong trade unions, has served to impede competitiveness and employment creation (Grubb and Wells 1993; Sadowski et al., 1995; Sparrow and Hiltrop, 1994). In contrast, the US "free market" approach which apparently affords employers greater autonomy, is often portrayed as a more "effective" alternative in this respect, most particularly in terms of its capacity for employment creation. An important and particular manifestation of this debate is the preferred employment practices of US MNCs in Europe. It is often suggested that US MNCs have been to the fore in promoting more free market/low labour regulation approaches (Dunning, 1993; Cleveland et al., 2000). Crouch and Streeck (1997) argue however, that US MNCs seem to be able to achieve a remarkable degree of autarchy from their social and political environment, which among other things enables them to cross national boundaries with great and growing ease. They argue that the globalisation of markets and the over-dependence on MNCs as providers of employment and contributors to economic growth has led to the decline of the governing capacity of the nation state and the capitulance of Governments to the requirements of multinational corporations.

Cooke and Noble (1998) identify levels of labour regulation and education standards as critical factors in the location of US FDI. Respondents to our study expressed a high degree of "satisfaction" with levels of labour regulation in Ireland, with nine out of ten firms indicating they considered that Ireland compared favourably with other destinations: i.e., they experienced comparatively lower levels of labour regulation here. Thus, Ireland was perceived as having a "pro-employer" focus, particularly in contrast to certain other European countries.

> US Multinationals look very closely at labour regulation – freedom of operation is socialized into their value system. Germany is very regulated, through, for example works councils and employers are in a straight jacket. This encourages a more conservative approach to employment creation. This is not nearly the case in Ireland, which is more employer friendly.
>
> Vice President (Human Resources), Company J.

> In terms of implications of labour regulation, especially in comparison to the UK, if Ireland keeps its advantages in other areas, such as labour quality/supply, then it will be OK, if not, then more labour regulation will be a serious problem and a disincentive to locate here for high-tech companies. This is a very unforgiving sector.
>
> Director and Vice President (Taxation), Company C.

Generally speaking, our findings indicate that the extent of labour regulation is used as a filter mechanism in the primary evaluation of possible sites for location. This suggests that multinationals in the high-tech sector are slow to locate in areas with a high degree of protection of employee rights and where it may be difficult to "downsize" or exit in an economic downturn.

On the industrial relations front, the available evidence suggests that MNCs have been an important source of innovation in management practices, particularly in the application of new management techniques and in expanding the role of the specialist Human Resource (HR) function (Gunnigle, Morley and Heraty, 1997). However, it would also seem that MNCs pose particular and unique challenges in the industrial relations sphere, particularly in their ability to switch the locus of production and also to adopt industrial relations styles which challenge, or indeed undermine the traditional pluralist model. In Ireland, we have seen a dramatic growth in union avoidance over the past decade (McGovern, 1989; Gunnigle, 1995; Gunnigle, Morley and Turner, 1997). This is particularly the case in the high-tech manufacturing sector where we find that the great majority of new large firms are non-union. Our findings reinforce this trend with nine out of ten firms studied operating a non-union policy in their Irish operations.

> (In response to question on the significance of trade unions in the location decision) It was a live issue…very much so. Any country that requires union recognition is immediately stricken off our list of possible locations
>
> Vice President (Human Resources), Company H.

> We don't deal with unions. We don't have a union in the US. It does not fit with our culture.
>
> Vice President (Strategy), Company G.

Other Issues

A number of "other factors" emerged as significant in influencing the decision of the firms studied to locate in Ireland. In particular, the open "pro-business" approach of the Irish government was seen as a positive factor in attracting inward investment. A number of respondents commented favourably on the commitment of the Government in supporting the establishment of production facilities in Ireland and in gaining access to government ministers and top-level department officials.

> The performance of the Irish government has been very good. It is very pro-business and easy to deal with, especially in comparison to say Singapore or the US. It sees the bigger picture and does not get caught up in rules/details. We have kept expanding our Irish operations and have found the government and its agencies very helpful.
>
> Director and Vice President (Taxation), Company C.

> The issue of access to government and government ministers was also very important. This is excellent in Ireland. I always feel I can get what access I need if I want it. We are a small company and could not get that access elsewhere. Such access can also be important at an EU level.
>
> Corporate Director (Human Resources), Company F.

V CONCLUSION

This paper sets out to provide some qualitative insights on factors impacting on the location of US FDI in Ireland and to tease out the specific impact of labour issues. As noted earlier, it is important to take account of the labour market context in which our data was gathered, given the dramatic changes which have occurred in terms of economic growth and employment creation over recent years.

Our findings point to the critical significance of Ireland's low corporate tax regime in attracting US FDI to Ireland. It also highlights the potential contribution of Ireland's negotiation of a future low rate of corporation tax (12.5 per cent) in retaining investment and attracting future investment. The following quotes from two US based senior executives working for Irish industrial promotions agencies aptly captures the situation:

> (In response to question on the significance of corporation tax in attracting US FDI)... Yes, this is the single biggest incentive. If you can at least draw (tie) on all the other factors with the competition then the corporation tax issues will crack it. In terms of the 2010 deadline, the UK have targeted this as an Irish negative: "they'll suck you in and then crucify you in 2010").

> Yes, this (corporate tax rate) is a huge issue. For many companies it is the difference between Scotland and Ireland rather than the people….the people factor is similar...it's the tax that ties them in. Holland is competing aggressively on tax: they will even go below 10% but are selective...it's negotiable…It's not just manufacturing – the 10% tax is crucial in software as well.

However, we also find that labour supply and labour quality are also significant in positively impacting on the location decision of FDI. It is the combination of these and certain other factors (especially location in the EU, English as first language) which were the primary drivers in the decision of respondent firms to locate in Ireland. Some of these labour factors such as supply and education were clearly pinpointed by respondent executives. However, other less tangible labour factors were also identified as significant, notably labour flexibility and the "work ethic". This agglomeration of labour factors is captured in the following quote from an industrial promotions agency executive who was instrumental in the attraction of recent large scale electronics corporations to Ireland:

> …a critical issue is labor flexibility and adaptability: we hear this again and again. It's what you get in quality of labor for the price you pay. Secondly, the positive demographics is critical – there is good supply in many areas. The availability of good bright people is very important….education is [also] is seen in a very positive light and has a great reputation.

Despite a widely held perception that labour costs have been a critically important factor in the attraction of multinational investment, our findings – which are broadly in line with Hannigan (1999) – indicate that labour cost was not a critical issue in the location decision of the multinational companies studied. Moreover, the issue of labour cost is more clearly linked with the degree of industry sophistication, with many high-tech companies locating in Ireland willing to pay "above the norm" salaries to skilled employees. In terms of labour cost, it seems that Ireland's system of successive centralised agreements at national level have assured multinationals of consistency and stability in controlling labour costs. However, in light of the recent tightening of the labour market, it is clear that many organisations, including multinational subsidiaries are experiencing staff retention difficulties, especially among skilled categories. This is effectively causing an upward pressure on wage levels and Hannigan (1999) reports that multinationals are becoming increasingly aware of the increasing need to control wage costs.

The issue of labour regulation tends to assume a relatively high degree of importance in the location decision of multinational companies. From the research collected, it appears that the degree of labour regulation is used as a filter mechanism in the primary evaluation of possible locations. Given the profile of multinationals locating in Ireland, it is hardly surprising that US firms have attempted to replicate non-union policies in their Irish operations. However, the main cause for concern among respondents appear to emanate from the volume of labour legislation being enacted by the EU. While this will not affect Ireland in isolation, multinationals are concerned that it is increasing social costs and making their European operations less competitive.

Finally, it is important to note the significance of some of the major FDI projects which have located in Ireland over recent years. The positive experiences of similar high-tech multinationals were cited by a number of respondents as being instrumental in the decision to locate in Ireland. This finding points to mimetic tendencies of US MNCs to copy others – often their rivals – and is in line with previous work by Krugman (1997) and Barry and Bradley (1997, 1999) who argue that this phenomenon may explain the cluster effect of industries in certain regions. In Ireland, the siting of Intel seems to have been particularly influential, as illustrated in the following quote from a senior industrial promotions agency executive:

> The product [i.e., Ireland] we now have to sell is the best in Europe. A critical issue is to point to the other major Fortune 500 companies who have located here. Intel was critical: look at who has followed...HP, UPS. Motorola was also a key. Intel and Motorola are seen as two of the best managed companies in the US.

Appendix 1: Summary of Interview Schedule: Main Areas Investigated re Location Decision

1. Details/Background on Corporation

- Age, scale, product/service portfolio, pattern of operation, performance, strategic issues, etc.

2. Irish Subsidiary

- Location/when established; employment; product/service; assessment of the strategic significance of Irish subsidiary (qualitative estimate)?
- Performance of Irish subsidiary: ramp up, quality, productivity, financial performance. Performance of Irish subsidiary compared to that of other similar facilities in your corporation's portfolio.

3. Decision to Locate in Ireland

- Key factors which led you to locate a subsidiary in Ireland?
- Other countries actively considered as a potential location?
- Factors influencing decision on where to locate within Ireland.

4. Labour Quality

- Assessment of overall labour quality in Irish subsidiary .
- Comparison with subsidiaries in other countries.
- Productivity levels in Ireland and comparison with similar facilities in organisation's portfolio.

5. Labour Availability

- Availability of labour supply among following workforce types (a) hourly/operative level; (b) technical; (c) clerical; (d) middle management; (e) top management.
- Areas of labour shortages.

6. Education Standards

- Assessment of education standards at the following levels: (a) high school equivalent; (b) vocational/technical certificate or diploma; (c) university degree or equivalent.
- Comparison with interviewee's experience in the US and other countries?

7. Labour Costs

- Labour costs as a proportion of your total production/service costs.
- Hourly pay rates for entry level workers in largest occupational category(US$).
- Comparison of Irish labour costs compare with the US and other countries?

8. Flexibility

- Assessment of flexibility/adaptability of your Irish workforce?
- Use of "atypical" work arrangements (e.g., temporary, contract, part-time and home working).

9. Labour Regulation

- Assessment of the extent of labour regulation in Ireland.
- Comparison to the US and other countries where corporation has subsidiaries.
- Does the company deal with trade unions in Irish operation?
- If yes, assessment of how was this decision made and evaluation of experience to date.
- If no, was this a conscious policy choice by the corporation?
- Significance of trade union recognition in decision on whether to locate a facility in Ireland?

10. Human Resource Management (HRM)

- Existence and role of specialist HRM function in Irish operation?
- Key HR priority areas which (from a corporate perspective).
- Use of performance related pay.
- Knowledge/significance of social partnership agreements.

11. General Impression of Ireland as a business location

- State of the Irish economy?
- Performance of Government?
- Business infrastructure in Ireland?
- Main positive aspects of your experience of doing business in Ireland?
- Main negative aspects which you would like to see addressed?

12. Future

- Given hypothetical situation of having to re-make location decision, would you locate in Ireland or elsewhere?
- Assessment of future prospects for Irish operation.

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